Erratum

1. J. Yang, B.A. Malomed and D.J. Kaup, "Embedded solitons in second-harmonic-generating systems." Phys. Rev. Lett. 83, 1958 (1999):

   Eq. (4) should read:

$$-\frac{1}{2}\delta V'' + (q-2k)V + \frac{1}{2}U^2 + 2\gamma_2(V^2+2U^2)V = 0. \qquad (4)$$

   That is, a factor of 2 in front of γ_2 was missed in the original paper.

2. J. Yang, "Complete eigenfunctions of linearized integrable equations expanded around a soliton solution," J. Math. Phys. 41, 6614 (2000):

   Two negative signs are missing in Eqs. (3.47) and (3.51). They should read:

$$\langle \bar{\Psi}(x,k), \bar{\Phi}(x,k')\rangle = -2\pi a^2 \delta(k-k'), \qquad (3.47)$$

   and

$$\begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix} \delta(x-x') = \int_{-\infty}^{\infty} \frac{1}{2\pi a^2}\left[-\bar{\Psi}(x,k)\bar{\Phi}(x',k) - \Psi(x,k)\Phi(x',k)\right] dk + \frac{1}{2}[\cdots]. \qquad (3.51)$$

3. J. Yang, B.A. Malomed, D.J. Kaup, and A.R. Champneys, "Embedded solitons: a new type of solitary waves". Mathematics and Computers in Simulation, 56, 585 (2001):

   Eq. (5) should read:

$$-\frac{1}{2}\delta V'' + (q-2k)V + \frac{1}{2}U^2 + 2\gamma_2(V^2+2U^2)V = 0. \qquad (5)$$

   That is, a factor of 2 in front of γ_2 was missed in the original paper (see also item 1 above).

4. I. Makasyuk, Z. Chen and J. Yang, "Bandgap guidance in optically-induced photonic lattices with a negative defect", Phys. Rev. Lett. 96, 223903 (2006)

   Page 3, left column, line 15:

$$I_L(x,y) = I_0 \sin^2\left(\frac{x+y}{\sqrt{2}}\right)\sin^2\left(\frac{x-y}{\sqrt{2}}\right)\left(1-\epsilon\exp\left(-\frac{(\mathrm{x}^2+\mathrm{y}^2)^4}{128}\right)\right)$$

   The two "sin" above should both be "cos", i.e. the correct expression is

$$I_L(x,y) = I_0 \cos^2\left(\frac{x+y}{\sqrt{2}}\right)\cos^2\left(\frac{x-y}{\sqrt{2}}\right)\left(1-\epsilon\exp\left(-\frac{(\mathrm{x}^2+\mathrm{y}^2)^4}{128}\right)\right)$$

5. Z. Shi and J. Yang, "Solitary waves bifurcated from Bloch-band edges in two-dimensional periodic media", Phys. Rev. E 75, 056602 (2007)

   Eq. (4.22): the correct D_1 value should be: $D_1 = -0.588073$.

6. M. Skorobogatiy and J. Yang, *Fundamentals of Photonic Crystal Guiding*, Cambridge University Press, 2008

   Eq. (8.25) on Page 215 (Sec. 8.1.2): the correct formula for $A(X)$ should be

$$A(X) = \sqrt{\frac{2}{|\alpha|}}\,\mathrm{sech}\frac{X}{\sqrt{|D|}}.$$